

The Oktoberfest Phenomenon

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Abstract Fundamental to the Oktoberfest is the provision that the deeply ingrained structural cores of the landscape can be taken into account. Through the explicitness of the functional state-termini relations, they have the capacity to enhance the relationship between motifs and themes. It follows that their causal determination can be treated as an efficient adaptation to the festival and transformational fitness. By building up its own dimensionality, the landscape has the capacity to resonate its unique state attractors. Their autonomous treatment allows for the processing of sophisticated modifications. Besides differences in the workspaces, the capacity to work towards unification is shown to converge on the global state attractors of intention and orientation. Their structurally significant aspects must be captured conceptually through the naming of the resulting kinematic states. Hence, what the crucial meaning of the Oktoberfest exactly is has been established and made visible through the naming of the final and all-inclusive state termini, which are *Toastmaster* and *Affection*. The latter carries the deep intention that biological mechanisms have reproduced in their pattern convolution. Finally, through the *Toastmaster* concept as the emerging novelty in the orientation the present discussion is meant to serve the explanation of uniqueness of the Oktoberfest spirit.

The Germanic Volksfest Phenomenon

In Bad Hersfeld, which is a city of the Part-State Hessen, are the people celebrating one of the oldest Volksfests in Germany (Bad Hersfeld: www.lullusfest.de). It is the Lullusfest, which since 852 is celebrated every year in memory of Saint Lullus, which was a pupil of Bonifatius. The festival is arranged in honour of the Saint at the October 16, i.e., date of death of this Archbishop. The local nature of the festival means that the attending people, are mostly from the hosting town and surrounding areas, but it may also attract national as well as international visitors.

Volksfests are celebrated every year in many German towns and in recurring turns. Committed to these events are the most modern novelties from the showman industry. It is common to build one or more beer tents, usually sponsored by local breweries, and set up on the meadows ('Wiesen') where the breweries offer live music. Further, at the Wiesen it is possible to order traditional food and try beer specially brewed for the restricted occasion. In general, one or more large beer tents will be equipped with hundreds of wooden benches and if necessary, expanded with a seating capacity in the thousands.

The most re-known Volksfest is the Oktoberfest, which is conceived of as the biggest Volksfest of the world. It occurs yearly in Munich, being a favourite place for patrons to spend the evening with their guests. Despite its great popularity, as a Volksfest it is however of temporary nature. Therefore, most mechanical attractions, games and beer tents are assembled in the weeks or months prior to the start of the festival, and dismantled once the Volksfest festival is over.

Located near the center of Munich is the Theresienwiese, locally called 'die Wies'n' that is the local name of the Oktoberfest. This great festival was started in 1810. As such, it constitutes a very important element on the Bavarian cultural scene. To get a hint of the complexity of the event, it may be worth mentioning the generally available fact that over 6

million people from around the world have attend the Oktoberfest in 2017. These people have consumed over 7.5 million Liters (1.98 million gallons). In addition to the beer, food consumption has included over 50,000 pork knuckles, close to 500,000 split roasted chickens, and 500,000 sausages. As a speciality, the 'white sausage' was invented in Munich in 1857. A tradition dating to a time before refrigerators, these morsels are often only served before noon and traditionally eaten with sweet mustard and freshly baked pretzels.

As a peculiarity, the *Wies'n* hit has Prussian roots and nevertheless it is an engulfed element of the Oktoberfest. It is par excellence the 'joy of coziness' that is brought about by the cheerful mood of the song. The following song cannot be left out at the *Wies'n*:

A toast, a toast
To cheer and good times
A toast, a toast
To cheer and good times.
ONE TWO THREE! DRINK UP!

Export Success of the Oktoberfest

For those who have not been able to participate and celebrate the Oktoberfest in Germany, there are Germanic Volksfest festivals staged across the US and Canada with sixteen percent of the US and ten percent of the Canadian populations claiming German ancestry. Moreover, the Chinese city of Qingdao has tried to make its Oktoberfest as authentic as possible. Another place is Blumenau, founded in 1850 by German immigrants to Brazil, which is organizing the Oktoberfest, attracting over one million people every year.

To give a more insightful account of the ingrained quality of the Oktoberfest concept, a textual description, reflecting the Oktoberfest abroad by two of Portland's best German-style bars has been selected for a detailed text analysis. These places were selected because they do celebrate the Oktoberfest, inspired by the iconic festivities of Munich. The text portion selected is the following:

Text Selection

Two of Portland's best German-style beer bars, [Stammtisch](#) and [Prost!](#) Portland, celebrate Oktoberfest on September 16-18 and September 30 – Oct. 2nd, respectively. Dan Hart, the owner of both establishments, invites Portlanders to put on the lederhosen and raise a stein to Oktoberfest during two weekend celebrations at each bar inspired by the iconic festivities of Munich. Events take place September 16 – 18 at Stammtisch, and September 30 – October 2 at Prost! Portland.

It will all begin at Stammtisch for an Oktoberfest block-party style celebration. Channeling the energy of the great outdoor celebrations of Munich, Hart and his team at Stammtisch will close down a portion of NE Flanders to transform the area into its very own Bavarian beer garden, complete with long wooden Oktoberfest tables they actually brought over from Munich, games like corn hole and hammerschlagen, festive decorations, music and face painting for kids. Chef Graham Chaney will be outside grilling all weekend, preparing a special menu featuring Oktoberfest staples like bratwurst, doner kebabs, roast pork, grilled chicken, salads, pretzels and more.

Most of the researchers, who use natural text for analysing its structure, stick to the idea that the significance of a text is increasing with increasing length. However, conclusions about the variability in natural text production can hardly be drawn from the length of a text and normatively based theories for selection and testing. This conclusion has been drawn after

several decades of empirical studies and method development. Irrespective of the extent of a text, what the researcher will have to stress, is the selection of a portion of text, which is judged to be of significance for the research problem.

The significance of the textual expressions resides not in the physical reality of a produced grapheme, but in the hypothetical fraction or share, related to a string of graphemes. It follows that the text producer's intention must be mediated through an exchange of virtual properties within flow fields. Since a flow field itself is made up of rotating strings that mediate all intentions, grapheme displacement must take into account all deviations from uniformity in space and time.

Stated in geometrical terms, the intrinsic property of the graphemes is assembled rhythmically and in a clocking mode. However, string movement must also be connected to a stepwise cyclic (κ_i) production of compounds, which leads to the introduction of composites for which the range of a work-cycle determines cyclic returns. With the flow fields as links, this measure generates the ground for the processing of phase-dependencies. Moreover, since evolutionary changes appear in the composites, i.e., with each other integrated strings of graphemes, this kind of integration generates layered composites as the units of evolution. Produced by the AaO-formalism, individual string movements on the micro-level allow their coupling with trends in the global text dynamics. In applying the procedures, outlined in Perspective Text Analysis (PTA, version Vertex) (I. Bierschenk, & B. Bierschenk, 2011) it will be made evident that state attractions can be established.

Coupling and Entangling of States

In a straightforward application of PTA/Vertex, it will be possible to derive the dynamical properties of coupling and entangling from the measured transitions through the (\emptyset_α) and (\emptyset_β) dummies. According to the relations, shown in Figure 1, capturing a change in the resonance (Δ_s) properties of a string requires the localisation of the states of strings on opposite dots.

The crucial import of local string interaction can be demonstrated only through a rotation-governed processing of specific changes in the coupling and entangling of states.

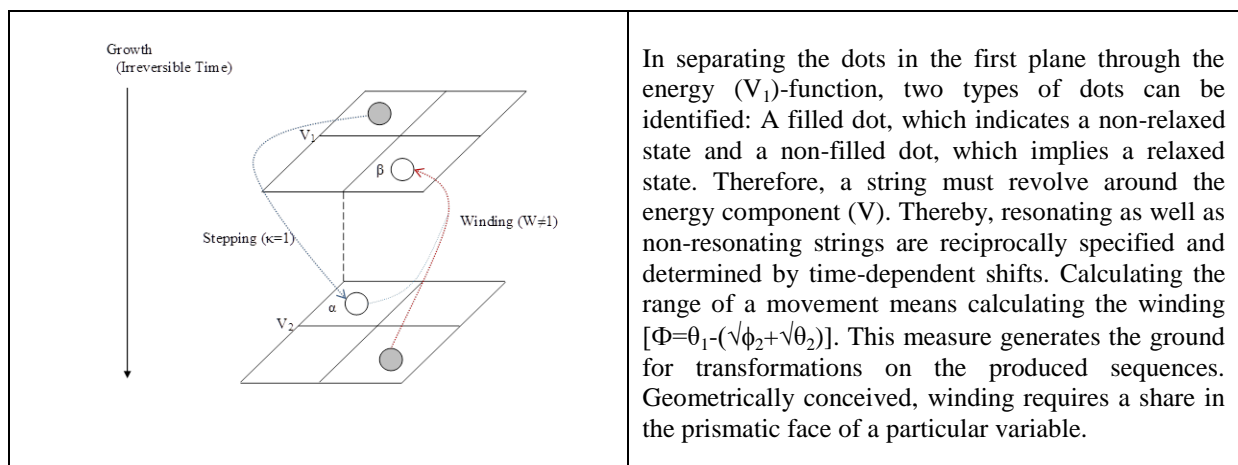


Figure 1 *Coupling and Entangling of States*

Every folding of a grapheme on a strand segment is treated as an expression of the variable's resonating property. Thus, the winding magnitude of a strand is taken as basis (1/1). Since it is an expression of the strand's contextual circumstances, its surface-oriented *curling* plays a complementary role, which is accounted for by adding the fraction of (1/10) as *curling value*

to the basic *winding value* of the strand. Thereafter the contextual fitness value is added as a *valve fraction* of (1/100) of the winding-value, but multiplied with the *number of graphemes*. This procedure is reiterated for every segment. To the extent that a segment is growing, this condition would lower the short-distance sensitivity of the strand and thus would increase its folding capacity.

Since materialised strings appear at the textual level as graphemes, they mark certain resonance properties. This means that text movements must be related to string-variety as well as grapheme-variability. In view of the fact that the individuality of a string manifests itself through the presence or absence of a grapheme, uniqueness in resonance and growth appear at the kinematic level as a movement, which is observable through the calculation of magnitudes. If the bonding of the (α, β) variables in the movement would appear to be dependent only on a linear relationship, its text space would appear stationary. However, the strict dependency in the bonding is governing channelling and refraction. Since, it has been possible to express the overall dynamics in a sequence as distance from the thermodynamic equilibrium it has been possible to show that this circumstance prevents the production of stationary results.

By handling every single component in a (A-O) pair individually, the component is following its own autonomous rhythm. The [AaO] system is capable of establishing two autonomous clocks, namely the A-clock governing the A-component and the O-clock governing the O-component. Unless measuring and observing of componential behaviour is related to proper biological time scales, measuring cannot be accounted for with exactness. In addition, the dynamics of a component must be related to intention. In producing dynamic movement patterns, the individuality in the clocking of a component is observable through PTA/Vertex (I. Bierschenk & B. Bierschenk, 2011). The quote given above can be characterized partly with the absence of frame factors, partly with softness in the moulding of particular viewpoints as well as standpoints. The experimental significance of the producer's style relates to timing and spacing, as shown below in Figure 2.

The radians of the Agent strand as well as the Objective strand are reproduced in Table A1 of the Appendix. Table A1 is showing that the governing (α) Variables is repeated whenever two or more (β) Variables appear within the range of a particular verb. Within the conceived set of specifying conditions, repetitions appear especially in the interval four as well as in six and seven, which implies a reusing of the active agent. Thus, the special character of the repetitions appears through the production of at least three deep local basins. The repetition of a grapheme configuration leaves the winding factor unchanged. In contrast, the channelling of a particular variable specifies the degree to which a particular grapheme configuration is winding and thereby is addressing minima during the course of writing.

The Agent Component

With the introduced novelties of the potential energy surface (PES) of Figure 2, synthesis can be bound to the manifestation of invariants in hyperbolic spaces. Furthermore, since the text building behaviour is coupled with invariants it implies simultaneously the assumption of a dynamic coupling of synthesis with the shapes, developing in this kind of spaces.

Shapes are carrying information on the particularities of the evolving style of writing. By means of PES graph, it has become possible to demonstrate that the invariants constitute the basis for the perception of unique and deeply entrenched minima. They are governing the evolving weak formation of the manifest and thus explicit parts of the (α) strand. The PES graphs complement each other in the establishment of the biological mechanisms, made responsible for the strategic formation of the produced dynamic energy flows.

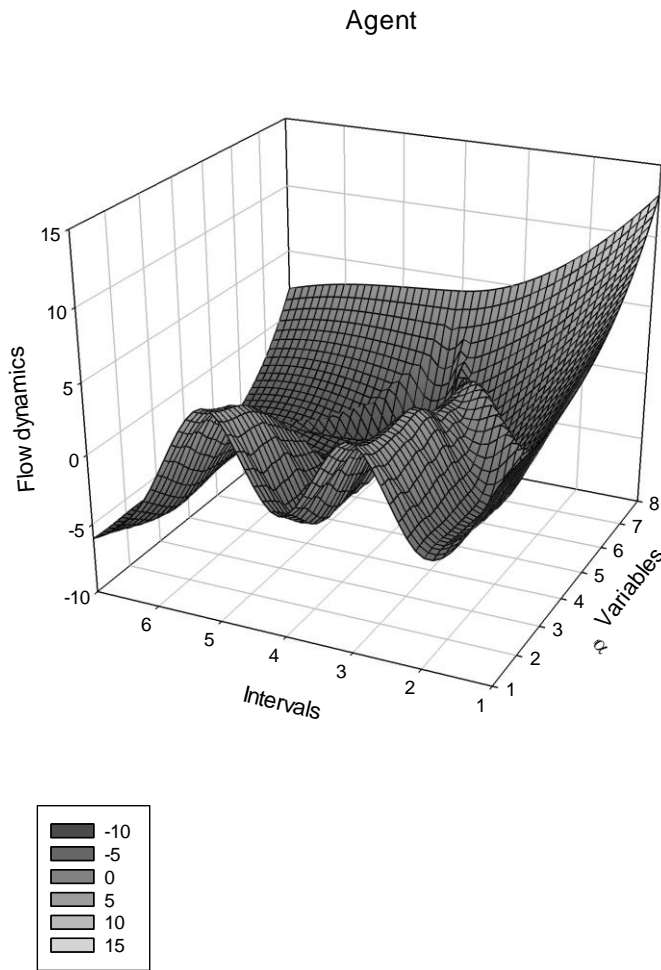


Figure 2 *Fluidity in the Agent component*

The Objective Component

In addition, the complementary Objective component can be characterized partly with the absence of frame as well as form factors, partly with very little softness in the moulding of the textual objectives compared to the textual agents. Moreover, substantial parts of the graph in Figure 3 reflect a high degree of explicitness in the formulation. It means on the kinetic level of text production that progress in understanding the nature and evolution of its trajectories depends mainly on the functions performed by the materialized paths.

When string winding is considered from a geometric point of view, it becomes evident that the space-related movements of strings of graphemes in the Objective are supporting no more than two deep local minima. On the other hand, the way in which the two local minima are connected in space depends on the dynamic behaviour of the strings. Their scope is approachable through a further study of the observed intermittent phase transitions.

For example, when the flow dynamics is an explicit function of just two minima, the distances appear in the rolling of the wave at the right-hand side. The trajectory of the wave runs in a considerable distance from separated basins one and two. The separation is the result of a substantial barrier that appears in interval four. Hence, a kinetic trap becomes formed which leads to the rising curve at the right-hand side. In rolling helically at its tip, the shapes of the resulting variations in height and in complexity are showing levels in grounding.

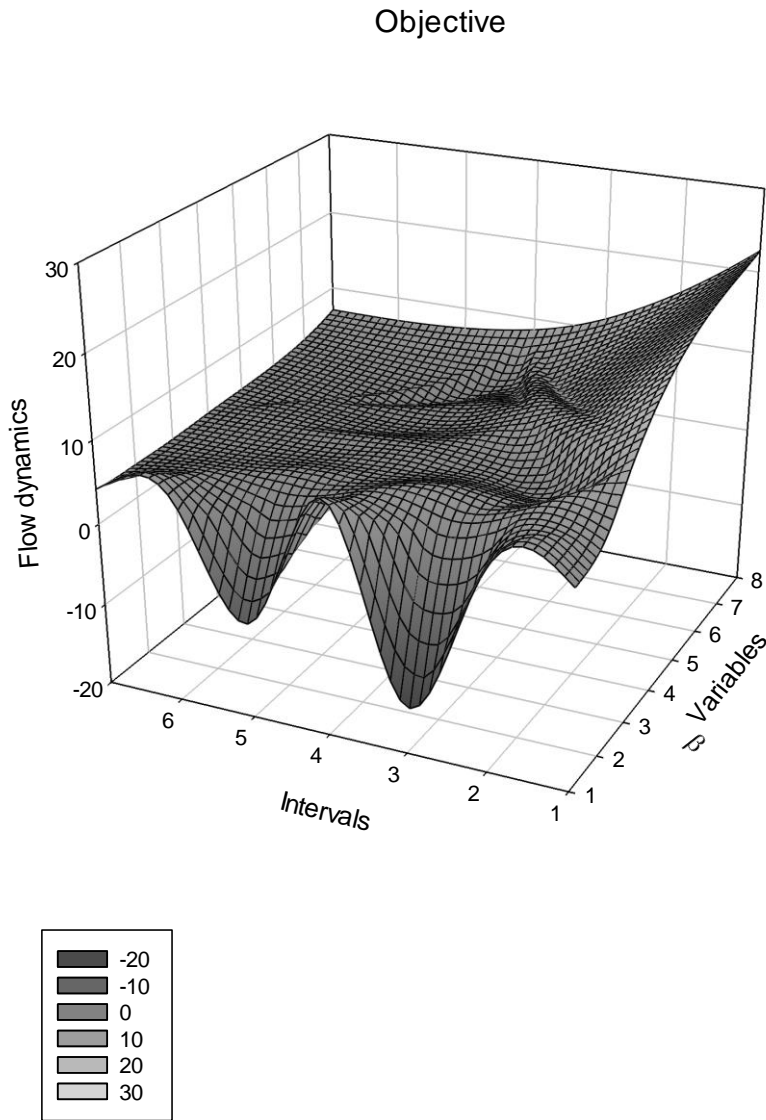


Figure 3 *Fluidity in the Objective component*

In particular, compared to the flow dynamics in the Agent component, the Objective component has produced a trajectory that is determining a complementary shape that stands in sharp contrast to the shape of the Agent component. This shape winds up with a path that is linking the stepping in the transition states of the intervals in calm manner. When arrested at the tip of the third variable in the first interval, the corresponding shape reflects the complexity of compact composites. The composite of the first variable in the fourth interval develops likewise a barrier. First in the intervals, six and seven appear composites that develop more slowly at its borders, compared to its centre. However, the changes appearing in the variables two and three, of the fifth interval are again the results of a slight barrier, which gives the course a different elevation and ends in a smooth fluid outflow.

Free Energy Surfaces

In general, a free energy surface (FES) is low dimensional and obtained from the previously described PES by averaging over all other degrees of freedom for fixed values (i.e., structural quantities such as the radians) of the order parameters (Y= Shear, X= Strain). This averaging is repeated to provide the fusion dynamics (an interpolation) over the range

for which the order parameters have physically motivated values. Just as for a basin surrounded by mountains on all sides, any step in the fusion process is uphill.

Shear (=Y) concerns the fraction of current native contacts, while *Strain* (=X) represents some measure of compactness. Since some composites fold easily, while others require more energy, the fusion dynamics refers to invested efforts. Its thermodynamic equilibrium determines geometrical properties that can be observed directly from the surfaces of FES. Understanding how a particular system can relax efficiently to particular structures or substructures (within certain regions) requires a global view on the landscape obtained from the PES. Even knowledge of the distribution of barrier heights is, according to Wales (2003, p. 2), *not generally sufficient to understand the global dynamics*, shown in the graphs. First, after the minima that separate the actual barrier are identified, local minima may become accountable.

For PES and FES, the displacement corresponds to changes in the strings of graphemes and the order parameters respectively. This topological characterisation will be applied to the dynamics of the strings of graphemes and their composite clusters as well as to the folding of groups of composites. The complicated folding phenomenon is a manifestation of the underlying textual flow dynamics of Figure 3.

The Orientation Landscape

Observable in the Orientation Landscape of Figure 4 are foothills at the right-hand side and in the background, which refer to fast folding, and thus lower barriers. The basins in the fore- and background are surrounded by mountains on all sides. This requires that the fusion process must proceed uphill. The path in the foreground is at sea level or below and indicates that the system first explores partly folded states before the process escapes to the pathway of fast folding. All together eleven folding pathways have been detected and have been labelled in the Orientation space. The highest mountain represents the highest barrier, which has led to hard climbing and the production of the slowest path. This is an expression of a set of specifying relations, which require more than one singularity (or measured position) for the specification of the climbing that is involved in the location of the global or final attraction.

With a global view on the presented landscape, grouping of composites can be validated based on the funnel concept (Wales, 2003, p 62). Funnelling must signify stability as well as change. Hence, the changes in internal entropy and potential energy have a folding correspondence between these parameters and the groups of matching configurations. The final or global state attractor can be found in the position (X=2, Y=3). The attractor has been labelled ***Toastmaster***. The corresponding global state attraction in the Intention dimension of Figure 5 has been marked in the position (X=3, Y=4) and has been labelled ***Affection*** and will be discussed in connection with the description of the established workspace.

As organizer and mood enhancer, the *Toastmaster* has an important role to play and he should therefore be an outspoken person who can organize and present the speakers at the bench in a playful and entertaining manner. He calls attention by getting the typical Oktoberfest songs performed by the people, present at the festival. The focus is undoubtedly on beer and the *Toastmaster* is governing the readiness of the people to cry on Prost!

If there are folks at the table, who would like to give a speech their appropriate order and speaking time must be organized and incorporated in dance and playing games. Often, multiple times of singing must be intersected because drinking, eating and talking can only occur when someone wants to contribute with a speech. The *Toastmaster* is responsible that all the decor of the Oktoberfest is set up as far as possible in white and blue, i.e., the classic Bavarian Oktoberfest colors. Finally, Uhmpa, Uhmpa music in stereo is a must on an Oktoberfest.

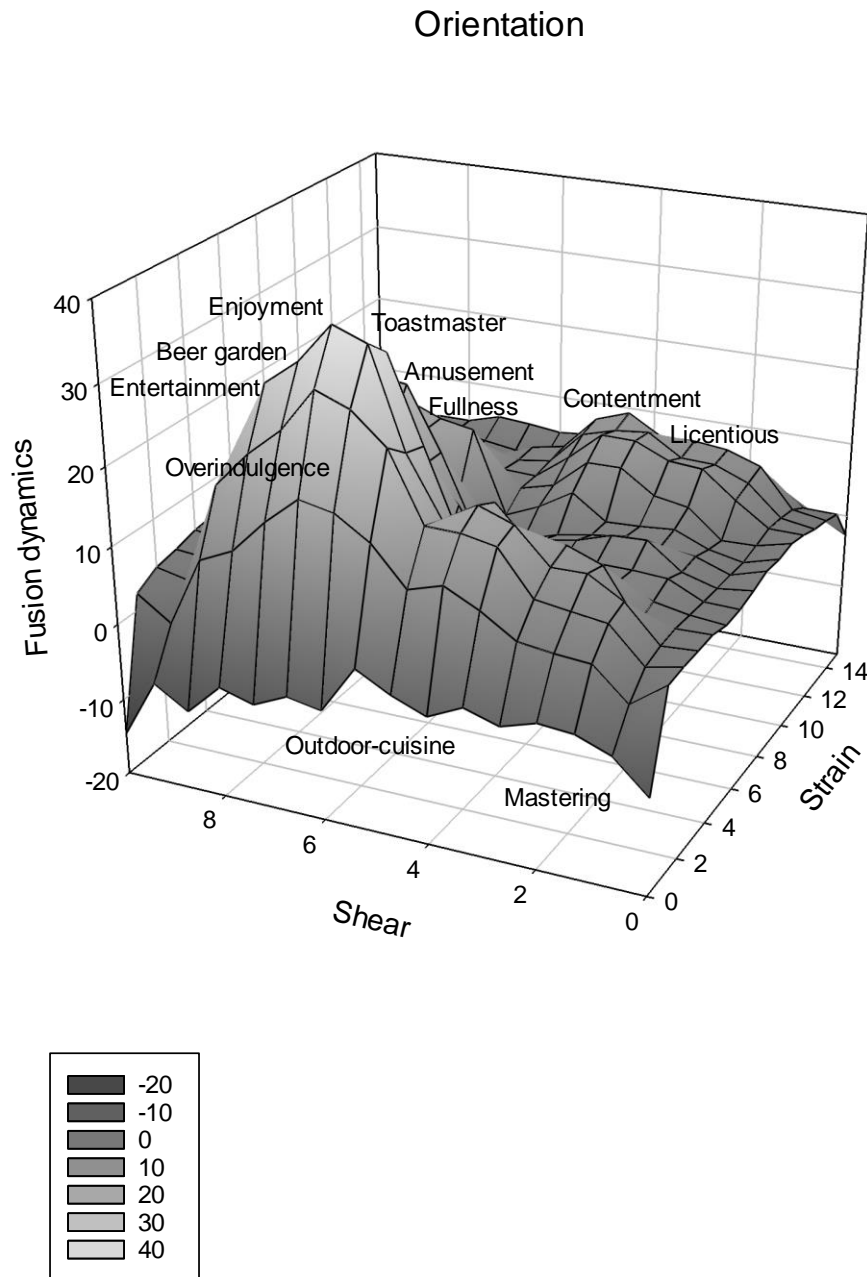


Figure 4 *Fusion Dynamics in the Orientation Space*

Enjoy beer – but the right way is the advice of any German beer keeper at the Oktoberfest. Only local brewers are allowed to serve their beer, which is firmly rooted, in Bavarian culture. With the knowledge of beer brands, enjoyment at the ‘fest’ comes with tasting the brands, which is enlightening the participants and link the producers with the consumers. All facets and the diversity of beer come to life. To exploit the entire spectrum is the particular *Enjoyment*, marked in the position (X=3, Y=7). However the implicit nature involved in the fun of the people in the *Beer garden* (X=2, Y=8) is underscored by the other two attractors below the sea level namely the *Outdoor cuisine* at (X=1, Y=5) and *Mastering* at (X=1, Y=3). Hold your drink in combination with mastering the outdoor cuisine and eating pretzel helps to keep the body in balance with exquisite Bavarian dishes.

Oktoberfest *Amusement* at (X=2, Y=3) is connected with a number of beer games and competitions. Old favourites are Stein Hoisting and Keg Stacking. Others are Carry the Wench and Tug-O-War, Grain Sack Toss and Corn Hole. Participating in the events is important for bragging rights on the line.

From light and crisp pilsners to dark and malty Baltic porters underlines the *Saturation* at (X=9, Y=8). It is like ales and lagers encompassing a spectrum of styles and flavours. The style most closely associated with the fall celebrations of the Oktoberfest is the Märzen. An amber beer style was developed over 200 years. The Märzen name comes from 'March beer' because it was historically brewed in March to be at peak flavour for the Oktoberfest celebration.

Entertainment at (X=5, Y=7) begins with the official prelude and grand entry of the landlords and breweries which is opening the fest and which involves about one thousand participants, including the landlord's families in decorated carriages. The magnificent horse-drawn drays of the Munich breweries, waitresses on decorated floats are enhanced by the beer tent bands.

Munich's world-famous annual beer fest gives its visitors the chance of *Overindulgence* at (X=7, Y=7) by drinking lots of Stein. The festival culminates in a big climax of drinking Maß Beer (a 1-litre of strong beer) and gun-salutes on the steps of the Bavarian Monument, marking the end of a sixteen-day celebration. As it appears, the fest is just a big overindulgence in unhealthy food, booze and funfair amusement.

The Mayor of Munich opens the festivities at noon on the first day of the fair when he drives the wooden tap into a barrel of beer and proclaims Ozapft is! ('It's tapped!'). The Mayor of Munich is tapping the Beer drum and a toast to *Contentment* at (X=7, Y=5) will be offered by the band. Congeniality and relaxation is marked with 'ein Prosit der Gemütlichkeit'. The bands of the Oktoberfest are known to play traditional folk music. They are also famous for playing marches and polkas.

The following description is based on an Oktober website, which was published on Jan 30, 2012. Concerning food, the producer of the website informs the reader on readily available Hendle that is whole chicken, which are grilled on spit. Variations are roasted duck or goose on spit. Roasted meats, especially pork together with potato dumplings are served up with traditional red cabbage and apple dish (Blaukohl). Local specialties such as roasted ox tails, grilled pork knuckles, or Bavarian Weißwürste, i.e., steamed white veal sausages, served with sweet mustard and sauerkraut. A pretzel or bread roll, is served with charcoal-fired fish-on-a-stick (Steckerlfisch).

Finally, at the position (X=7, Y=3) appears *Licentious*, meaning vegetarian ingredients at the banquet which consists of potato salad or potato soup, and implies feasting on massive warm, soft pretzels, cheese plates with bread. Typical dessert dishes include Dampfnudel, a steamed honey-dumpling served with vanilla sauce, apple strudel, and Kaiserschmarrn, a sugared pancake with raisins. From Pan-roasted, sugar-glazed almonds (gebrannte Mandeln) to cotton candy (Zuckerwatte), from glazed fruits to ice cream. The decorated gingerbread hearts with slogans and phrases iced onto them might be more of a feast for the eyes than the stomach.

The Intention Landscape

The evolution of intention and the discovery of its dimensions presuppose the presence of a mechanism, which is governing the folding of the super-strings of a sequencing space into point attractors of the workspace at the kinematic level. Through individual variations in the formed point attractors, it is possible to demonstrate structural stability in the morphogenesis of the invariants of intention. The kinetic instabilities of the composites of processed super-strings form the initial material basis. However, the morphological

significance of the established composites will be captured in the growing of motifs. Thus, emerging are landscape-specific properties, which provide for a strictly unified presentation of order-relations of the kind shown in the landscape of the Intention.

Of particular import is the depth of the appearing attractors. The graph of Figure 2 already was pointing towards the implicitness of the deeply ingrained motifs. Thus, at the position $(X=3, Y=5)$ *Enjoyment* is the result of an intentional behaviour that hangs on parrying beer drinking. Before each break, the band marks that Beer is to be served in a Maß, i.e., a one-liter Stein which the Beer maids and waiters must be able to carry. This means 10 of these beer-filled Steins at a time. As the evening wears on, the music becomes louder and more and more people begin to sing, linking arms and swinging their Steins from side to side, some standing and swaying and dancing on benches. Dancing on tables would not be allowed.

As previously mentioned, *Affection* at $(X=3, Y=4)$ is at the root of the Intention dimension. In the view of other participants, sitting at the bench, the attractor implies a display of physical intimacy. Of course, the acceptable display varies with the context and people at a public place like the Oktoberfest. Typical of physical affection is its association with positive feelings toward the other participants, sitting at the bench. This kind of nearness has been related to the formation of bonds.

One of the implied attractions, associated with the Oktoberfest is the display of affection, which refer to patterns of conduct, which includes subjective assessments of liking. The other neighbouring attractions are *Amusement* at $(X=2, Y=5)$ and *Entertainment* at $(X=2, Y=7)$. Both have, in contrast to their appearance in Figure 4, the quality of deep-seated states. Thus, within the dimension of Intention, they are reflecting inherent behavioural aspects. A further attractor with the implicit behavioural quality is emerging in the position $(X=6, Y=7)$ and referring to *Kindness*.

Officials of the Oktoberfest have been keen to keep revellers away from Muslim refugees, which were expected to get involved into brawls because they are certainly not used to meet very drunk people in public. The influx of tourists and refugees has become a focal point, which the officials of the Oktoberfest had to handle by mixing this particular fraction of people with up to six million beer-drinkers. However, tension had not mounted to the degree it was expected by the politicians because there was no sign of crisis or anxiety.

At the festival in Munich *Lavishness* at $(X=1, Y=5)$ means brewers unleash their version of a Doppelbock, which dates back to the sixteenth century. Other versions are Maximator, Optimator, Unimotor and Triumphator, which during the festival are exposed in the tents of the breweries of Munich such as Paulaner, Augustiner and Löwenbräu. All are accompanied by the bands as well as singing and dancing.

Fundamental to complex landscapes is the provision that the deeply ingrained structural cores of the underlying pattern formations can be taken into account. In a final step, the explicitness of the functional state-termini relations has the capacity to enhance the essential relationship between the depth and the height of the appearing attractions. It follows that their common causal determination can be treated as an efficient definition of adaptation and consequently transformational fitness.

A landscape reflects its own unique state attractors. The resulting attractors are building up the development of the dimension of intention. Its autonomous treatment allows for the processing of sophisticated modifications, related to the following termini.

Contest at $(X=13, Y=2)$ means seeing how officials as candidates must participate in the Maß-Krug stemming in order to prove their viability. This test of strength implies that the contestants must hold a full litre of beer in a Stein as long as possible.

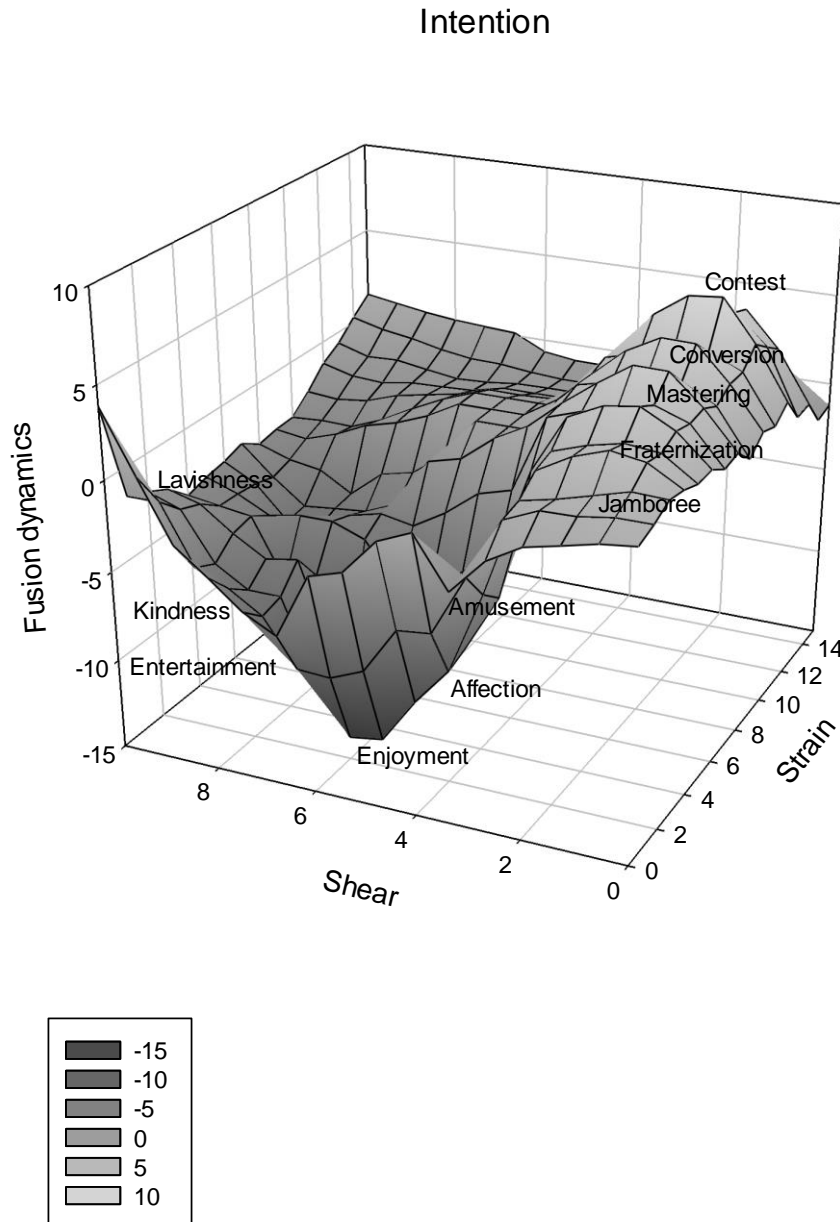


Figure 5 *Fusion Dynamics in the Intention Landscape*

Getting in line, once the contestant is handed the Stein, it needs to be held with the arms extended and parallel to the floor until the Stein is dropped. Participation in all the events is more important than ever before because there are bragging rights on the line.

Conversion at (X=11, Y=2) of the Oktoberfest means technically that it, for being authentic, can only be conceded within the limits of Munich and the fest would not be the same without the amber-coloured malty beer. To repeat, unlike most styles, the Oktoberfest brews are tied to a specific time.

Mastering a marvellous choice of beers from regular 'Helles' to wheat beers 'Weizen' and even 'Dunkel' directs attention to the task of *Mastering* at (X=9, Y=2). However, at arriving, drinking cannot start without knowing the involved etiquette and the meaning of P's and Q's. Furthermore, shared tables are the norm during the Oktoberfest. Little brass plates at the wall may very well inform the newcomer, that the table is a *Stammtisch*, i.e., a table reserved at a particular time for group of friends or a regular club.

Becoming friendly with others is the process of *Fraternization* at (X=7, Y=2). It is more than an office (work) romance because it involves the establishment of friendships and alliances to safeguard one's place or position in the organization. When done at the Oktoberfest effectively, colleges may be helpful in securing a job or promote a professional advancement.

The Oktoberfest is not just an event occurring in Munich. As *Jamboree* at (X=5, Y=2) chugging Steins of beer with passion is cropping up in the most unlikely places around the world. For example, formerly known as Berlin (the name was changed in 1916) Kitchener in Canada lays claim to the world's second largest Oktoberfest. That is a testament to the enduring appeal of German culture. Every time the Oktoberfest returns, people get ready their dirndl dresses and lederhosen. What is celebrated are the Bavarian roots, eating some wurst and entertain oneself with polka and raising a Stein. Prost! There are lots of things to do, like in Munich, i.e., eating, singing, mingling, sporting in lederhosen and listening to folk music, speaking German and performing the chicken dance!

Discussion

Based on the Figures 2 and 3, it has been demonstrated that the theoretical significance of the gradient dynamics and angular articulation relates to the way in which the sequencing spaces of the processed text are constraining string movement. It follows that rotational differences can be analysed effectively with reference to the complementary running of the A- and O-clocks.

With respect to the running of the O-clock and phase drifting, two lateral minima can be observed in the graph. These minima are the most distinctive features of the swiftly developing texture and are joined together in a webbed fashion. Thus, observable are phase transitions, which demonstrate a high degree of implicitness related to two distinct variables. On the kinetic level of text production, it means that increasing depth implies increasing indirectness and consequently enlargement in the sinking of the textual objectives into the ongoing conceptualisation. However, progress in understanding its biological nature and the evolution of trajectories has been shown to depend mainly on the functions performed by the evolving channels. As demonstrated, accessing their scope and import is approachable only through the observation and study of intermittent phase transitions. For example, when a large increase in critical acceleration can be observed, it points primarily to integration depth. To reiterate, a steep below zero corresponds operationally with lower rotational speed, compared to non-negative expressions.

What kind of morphology is developing based on the running A-clock is dependent on the conductive capacity of the channelling operations in the A-component. However, whenever the A-clock prefers to stay at its own tempo, it is satisfying its own biological clocking mode. Its special character has generated an impressive complementarity. A high degree of rotational acceleration, in contrast to speed, is responsible for very deep minima and only a few degrees of bubbling at the top of the resulting shape. The emerging changes in complexity are the result of critical changes in most of the intervals. For their geometrical manifestation, corresponding measurements of displacement have been related to the computation of radians (Hestenes, 1986/1993).

From the beginning, all Germanic societies have been linked to the lubricating effect of beer, which played a major role in the development of their civilizations. Right from the beginning, beer drinking at '*Symbel*' was an indoor and a high-status event, which were structured according to precisely defined rituals. Wills (2012, p. 4) has listed the essential elements. Some of them are: (1) ordered seating, (2) beer or mead beverages. Moreover, (3) oaths and boasts have been part of the proper *Symbel*. During centuries, the *Symbel* and its

followers carry the primacy of beer as important factor for the convergence of economic and political functions into social and cultural systems, interpersonal relationships and behavioural norms (Bauschatz, 1982).

In closing the cycle, the table at ‘*Symbel*’ and people participating in the rituals of beer drinking reappear at tents of the Oktoberfest, but now in settings where great numbers of people are supplied with alcoholic drinks. The tradition that the inviting Principals supply their staffs with drinks has survived and has symbolic import. It contributes to the construction of alternative realities by the people at a bench. In this atmosphere alternative political visions may become possible and potentially disturbing or frightening aspects may disappear into a transitional world and thus become minimised, which ultimately is enhancing the positive aspects of coming together at ‘*Symbel*’ within the context of the Oktoberfest.

During the presentation of the structural relations in the landscapes of Orientation and Intention there have been several links made to Oktoberfest events outside Munich and Germany as well. Despite the fact that no other celebration may come close to the fest in Munich, the actual depiction concerns not the properties of the event in the first place but catching of the Oktoberfest spirit.

Hence, what the essential meaning of the Oktoberfest exactly is has been established and made visible through the naming of the final and all-inclusive state termini of Figure 4 and 5. The latter carries *Affection* as the deep intention that biological mechanisms have reproduced in their pattern convolution. Meanwhile, the emerging novelty of orientation carries *Toastmaster* as the substantial and explicit outcome.

References

- Bad Hersfeld. www.lullusfest.de > Startseite
- Bauschatz, P. C. (1982). *The well and Tree: World and time in early Germanic culture*. Amherst, CA, University of Massachusetts Press.
- Bierschenk, I., & Bierschenk, B. (2011). Perspective Text Analysis: Tutorial to Vertex. *Cognitive Science Research*, 100. Copenhagen University & Lund University.
- Export (2017). Authoritative Guide. <https://germanfoods.org/find/oktoberfest-north-america/>
- Hestenes, D. (1986/1993). *New foundations for classical mechanics*. Dordrecht: Kluwer Academic.
- Oktoberfest (2012). <https://www.slideshare.net/abibhiabhi/deutsch-project>.
- Oktoberfest. (2017). <https://www.oktoberfest.de/de/>
- Wales, D. J. (2003). *Energy landscapes: Applications to clusters, biomolecules and glasses*. Cambridge: Cambridge University Press.
- Wills, J. (2012). Symbel: The heathen drinking ritual? Oðrœrir, Issue 2. www.academia.edu/2652/Symbel_The_Heathen_Drinking_Ritual

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Appendix

Table A1
Intervals and Radians of Alpha and Beta Variables

No	Case	Interval	Alpha	Beta
1	1	1	3.516800	3.987800
2	2	1	3.624687	5.688900
3	3	1	3.624687	11.770000
4	1	2	-2.191200	4.710000
5	2	2	-2.191200	6.888600
6	3	2	-2.191200	4.953600
7	1	3	4.436800	-14.277800
8	2	3	3.393629	4.929800
9	3	3	3.393629	5.495400
10	4	3	1.708421	4.584399
11	5	3	1.708421	7.314300
12	1	4	-1.433510	8.281800
13	2	4	-3.778720	5.983811
14	3	4	-3.778720	5.031000
15	4	4	-3.778720	5.275200
16	5	4	-3.778720	4.301800
17	6	4	-3.778720	4.678600
18	7	4	-3.778720	3.956400
19	8	4	3.987800	8.580000
20	1	5	4.584399	-8.245640
21	2	5	3.503052	4.050600
22	3	5	1.013671	4.647200
23	1	6	-1.331540	5.055399
24	2	6	-3.676740	4.929800
25	3	6	-3.676740	4.144800
26	4	6	-3.676740	4.458800
27	5	6	-3.676740	4.396000
28	1	7	-6.021950	4.207600
29	2	7	-6.021950	3.987800
30	3	7	-6.021950	4.050600
31	4	7	-6.021950	4.333200

Table A2
Transformation of Beta Variables

X	Y	Node	Value	Transformation
0	1	1	3.9878	Will all
1	0	2	5.6889	Begin at Stammtisch
1	1	T₁	9.6767	Celebration
2	0	4	4.7100	Channelling the energy
3	0	6	4.9536	Of Munich (beer)
3	1	T₂	9.6636	Beer Glut
4	0	D	0	
5	0	5	6.8886	Of the great outdoor celebration.
5	1	T₃	6.8886	Jamboree
3	1	T ₂	9.6636	Beer Glut
5	1	T ₃	6.8886	Jamboree
5	2	T₄	16.5522	Feasting
1	1	T ₁	9.6767	Celebration
5	2	T ₄	16.5522	Feasting
7	3	T₅	26.2289	Fraternization

6	0	8	4.9298	Close down a portion
7	0	9	5.4954	Of NE Flanders
7	1	T₆	10.4252	Transfer
7	3	T ₅	26.2289	<i>Fraternization</i>
7	1	T ₆	10.4252	<i>Transfer</i>
7	3	T₇	36.6541	Controlling
8	0	D	0	
9	0	10	4.5844	Transform the area
9	1	T₈	4.5844	Fashion
7	3	T ₇	36.6541	<i>Controlling</i>
9	1	T ₈	4.5844	<i>Fashion</i>
9	3	T₉	41.2385	Conversion
10	0	13	5.983811	Brought over (from Munich)
11	0	14	5.031	From Munich
11	1	T₁₀	11.014811	Transport
12	0	15	5.2752	, games like corn hole
13	0	16	4.3018	And hammerschlagen
13	1	T₁₁	9.5770	Contest
11	1	T ₁₀	11.014811	<i>Transport</i>
13	1	T ₁₁	9.5770	<i>Contest</i>
13	2	T₁₂	20.591811	Commitment
15	2	17	4.6786	Festive decoration
15	3	18	3.9564	, music
14	3	T₁₃	8.6350	Tantalizing
13	2	T ₁₂	20.591811	<i>Commitment</i>
14	3	T ₁₃	8.6350	<i>Tantalizing</i>
13	3	T₁₄	29.226811	Affection
9	3	T ₉	41.2385	<i>Conversion</i>
13	3	T ₁₄	29.226811	<i>Affection</i>
12	3	T₁₅	70.465311	Licentious
15	4	21	4.0506	Be outside
15	5	22	4.6472	Grilling at weekend
14	5	T₁₆	8.6978	Barbecue
12	3	T ₁₅	70.465311	<i>Licentious</i>
14	5	T ₁₆	8.6978	<i>Barbecue</i>
11	5	T₁₇	79.163111	Contentment
15	6	23	5.0554	Preparing a special menu
15	7	24	4.9298	Featuring Oktoberfest staples
14	7	T₁₈	9.9852	Banquette
15	8	25	4.1448	Like bratwurst
15	9	26	4.4588	Doner kebabs
14	9	T₁₉	8.6036	Fast-food
14	7	T ₁₈	9.9852	<i>Banquette</i>
14	9	T ₁₉	8.6036	<i>Fast-food</i>
13	9	T₂₀	18.5888	Appetizers
12	10	D	0	
11	10	27	4.3960	Roast pork
11	9	T₂₁	4.3960	Main-dish
13	9	T ₂₀	18.5888	<i>Appetizers</i>
11	9	T ₂₁	4.3960	<i>Main-dish</i>
11	8	T₂₂	22.9846	Grounding
13	6	T ₁₇	79.163111	<i>Contentment</i>
9	7	T ₂₂	22.9846	<i>Grounding</i>
9	8	T₂₃	102.147711	Saturation
10	10	28	4.2076	Grilled chicken
9	10	29	3.9878	, salads
9	9	T₂₄	8.1954	Wrapping
8	10	30	4.0506	pretzels

7	10	31	4.3332	And more.
7	9	T₂₅	8.3838	Lavishness
9	9	T ₂₄	8.1954	Wrapping
7	9	T ₂₅	8.3838	Lavishness
7	8	T₂₆	16.5792	Kindness
9	8	T ₂₃	102.147711	Fullness
7	8	T ₂₆	16.5792	Kindness
7	7	T₂₇	118.726911	Overindulgence
6	10	D	0	
5	10	11	7.7314	Into its very Bavarian beer garden
3	8	T₂₈	7.7314	Shared Tables
7	7	T ₂₇	118.726911	Overindulgence
5	9	T ₂₈	7.7314	Shared Tables
5	7	T₂₉	126.0714	Entertainment
4	10	12	8.2818	Completed with long wooden Oktoberfest tables they
3	10	19	8.5800	Painting for kids.
3	9	T₃₀	16.8618	Preparation
5	7	T ₂₉	126.0714	Entertainment
1	8	T ₃₀	16.8618	Preparation
2	7	T₃₁	142.9332	Beer garden
0	8	D	0	
0	7	3	11.77	For an Oktoberfest block party-style celebration.
1	7	T₃₂	11.77	Intirock band
2	7	T ₃₁	142.9332	Beer garden
1	7	T ₃₂	11.77	Intirock-band
3	7	T₃₃	154.7032	Enjoyment
0	6	D	0	
0	5	20	-8.24564	Will (chef Graham Chaney+be outside+grill all weekend
1	5	T₃₄	-8.24564	Outdoor-cousin
3	7	T ₃₃	154.7032	Enjoyment
1	5	T ₃₄	-8.24564	Outdoor-cousin
2	3	T₃₅	146.45756	Amusement
0	4	D	0	
0	3	7	-14.2778	Will (Hart and his team at stammtisch+close down on a portion +of ...)
1	2	T₃₆	-14.2778	Mastering
2	3	T ₃₅	146.45756	Amusement
1	3	T ₃₆	-14.2778	Mastering
2	3	T₃₇	132.17976	Toastmaster

Table A3*Extraction of termini from the O-mesh*

<i>X</i>	<i>Y</i>	<i>A-component</i>	<i>O-component</i>	<i>English</i>	<i>Fusion</i>
		<i>Pendulum</i>	<i>Destination</i>	<i>Extraction</i>	<i>Value (q)</i>
1	1	T ₁ : 1 → 2	T _{O1}	Celebration	7.141487
3	1	T ₂ : D → 3	T _{O32}	Intirock band	3.624687
3	2	T ₃ : T _{A2} → T _{A1}	T _{O5}	Fraternization	10.766174
5	1	T ₄ : 7 → 8	T _{O6}	Transfer	7.8304
5	2	T ₅ : T _{A4} → T _{A3}	T _{O3}	Jamboree	18.596574
7	1	T ₆ : D → 9	T _{O6}	Transfer	3.3936
7	2	T ₇ : T _{A6} → T _{A5}	T _{O5}	Fraternization	21.990174
9	1	T ₈ : 10 → 11	T _{O8}	Fashion	3.416842
9	2	T ₉ : T _{A8} → T _{A7}	T _{O36}	Mastering	25.407016
11	1	T ₁₀ : D → 19	T _{O30}	Preparation	3.9878
11	2	T ₁₁ : T _{A10} → T _{A9}	T _{O9}	Conversion	26.394816
13	1	T ₁₂ : 20 → 21	T _{O16}	Barbecue	8.087452
13	2	T ₁₃ : T _{A12} → T _{A11}	T _{O11}	Contest	34.482268

14	2	$T_{14}: 4 \rightarrow 5$	T_{O3}	Jamboree	-4.3824
14	4	$T_{15}: D \rightarrow 6$	T_{O2}	Beer Glut	-2.1912
13	4	$T_{16}: T_{A15} \rightarrow T_{A14}$	T_{O12}	Commitment	6.5736
14	6	$T_{17}: D \rightarrow 12$	T_{O30}	Preparation	-1.43351
13	6	$T_{18}: T_{A17} \rightarrow T_{A16}$	T_{O16}	Licentious	-8.006951
14	8	$T_{19}: D \rightarrow 22$	T_{O16}	Barbecue	1.0137
13	8	$T_{20}: T_{A19} \rightarrow T_{A18}$	T_{O20}	Appetizers	-6.99341
12	9	$T_{21}: D \rightarrow 23$	T_{O18}	Banquette	-1.3315
12	8	$T_{22}: T_{A21} \rightarrow T_{A20}$	T_{O22}	Grounding	-8.32491
10	9	$T_{23}: 13 \rightarrow 14$	T_{O10}	Transport	7.5574
8	9	$T_{24}: 15 \rightarrow 16$	T_{O11}	Contest	7.5574
8	8	$T_{25}: T_{A24} \rightarrow T_{A23}$	T_{O23}	Saturation	-15.1148
6	9	$T_{26}: 17 \rightarrow 18$	T_{O13}	Tantalizing	7.5574
6	8	$T_{27}: T_{A26} \rightarrow T_{A25}$	T_{O25}	Lavishness	-22.6722
6	7	$T_{28}: T_{A27} \rightarrow T_{A25}$	T_{O26}	Kindness	-30.99711
4	9	$T_{29}: 24 \rightarrow 25$	T_{O19}	Fast-food	-7.3534
2	9	$T_{30}: 26 \rightarrow 27$	T_{O21}	Main-dish	-7.3534
2	8	$T_{31}: T_{A30} \rightarrow T_{A29}$	T_{O31}	Beer garden	-14.7068
2	7	$T_{32}: T_{A31} \rightarrow T_{A28}$	T_{O29}	Entertainment	-45.70391
1	7	$T_{33}: 28 \rightarrow 29$	T_{O24}	Wrapping	-12.044
1	5	$T_{34}: 30 \rightarrow 31$	T_{O25}	Lavishness	-12.044
2	5	$T_{35}: T_{A34} \rightarrow T_{A33}$	T_{O35}	Amusement	-24.088
3	5	$T_{36}: T_{A35} \rightarrow T_{A32}$	T_{O33}	Enjoyment	-69.79191
3	5	$T_{37}: T_{A36} \rightarrow T_{A13}$	T_{O14}	Affection	-35.309642